

**REMARKS/ARGUMENTS**

Of pending claims 4, 5, 7, 9, 10-27, claims 18-27 were withdrawn by the Examiner and claims 4, 5, 7, 9-17 were rejected. Applicants disagree with such withdrawal for the reasons stated below. The claims have been amended as noted above. Reexamination and reconsideration of the claims are respectfully requested.

**Examiner states that the newly submitted claims 11, 18-27 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims as originally submitted were not drawn to a device or method having multiplexing of at least one cathode and/or anode reservoir and/or waste reservoir.**

To begin, claim 11 was not a newly submitted claim. Applicants assume this is a typographical error by the Examiner.

All of the claims currently pending are drawn to a device or method having multiplexing of at least one cathode and/or anode reservoir and/or waste reservoir. In addition, the previously added claims relate to the existing claims as highlighted by the following table:

<u>Claim #</u>	<u>Existing claims</u>
4	multiplexed <b>anode</b>
5	adds multiplexing of at least one of the cathode reservoirs
7	adds multiplexing of at least one of the waste reservoirs
9	method based on claim 4
10	multiplexed <b>anode</b>
11	method based on claim 10
12-14	depend from claim 11
15-17	depend from claim 9

<u>Claim #</u>	<u>Previously added claims</u>
18	<b>same as claim 4</b> but with multiplexing of the <b>cathode</b> rather than anode
19	adds multiplexing of at least one of the anode reservoirs
20	adds multiplexing of at least one of the waste reservoirs
21	<b>same as claim 4</b> but with multiplexing of the <b>waste</b> rather than anode
22	adds multiplexing of at least one of the anode reservoirs
23	adds multiplexing of at least one of the cathode reservoirs
24	method based on claim 18
25	method based on claim 21
26	<b>same as claim 10</b> but with multiplexing of the <b>cathode</b> rather than anode
27	method based on claim 26

Therefore, Applicants believe that claims 18-27 were incorrectly withdrawn by the Examiner and should be reinstated.

**Claims 5, 7, 9-17 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite.**

The Examiner states that the limitation of "at least one of the cathode reservoirs" in claim 5 lacks sufficient antecedent basis. Claim 5 depends from claim 4; claim 4 has been amended to include "at least one cathode reservoir" and claim 5 has been amended to specify "at least one of the at least one cathode reservoirs". Therefore, Applicants believe there is proper antecedent basis.

The Examiner states that the limitation of "wherein at least one of the waste reservoirs" in claim 7 lacks sufficient antecedent basis. Claim 7 depends from claim 4; claim 4 has been amended to include "at least one waste reservoir" and claim 7 has been amended to specify "at least one of the at least one waste reservoirs". Therefore, Applicants believe there is proper antecedent basis.

The Examiner states that the limitation of "between the cathode reservoirs and the common anode reservoir" in claim 9 lacks sufficient antecedent basis. Claim 9 has been

amended specify electrophoretically separating "between the at least one cathode reservoir and the single anode reservoir" which has been specified earlier in the claim. Therefore, Applicants believe there is proper antecedent basis.

The Examiner states that the term "common" when referring to the anode reservoir is unclear. The term "common" has been changed to "single" in the appropriate claims in an effort to increase clarity.

**Claims 4, 5, 7 and 9-17 were rejected under 35 U.S.C. 102(e) as being anticipated by Knapp, et al. (6,444,461 B1).**

The Examiner states that Figs. 9-11 illustrate a capillary array electrophoresis plate as claimed. Regarding **claim 4**, Applicants do not find each of the elements of the claim in Figs. 9-11. In particular, Applicants do not find an array of injection channels, each channel having a first leg and a second leg, the first leg connected at one end to a plurality of sample reservoirs and at the other end to one of the separation channels, the second leg connected at one end to one of the separation channels and at the other end to at least one waste reservoir. As described in Knapp et al. in relation to Fig. 9, in operation, a sample fluid, e.g., disposed in port 944, is flowed through transverse channel 942, and across the intersection of the parallel channels 904-932 by applying a potential across ports 944 and 946. Thus, there is not an array of injection channels as claimed, rather a single channel 942 intersects the parallel channels 904-932. Similarly, Fig. 10 of Knapp et al. illustrates a transverse channel 1024 which intersects parallel channels 1004-1010. In Fig. 11 of Knapp et al., the device is described to include a main sample channel 1114 which is intersected by multiple parallel separation channels 1106-1118. Each of parallel separation channels 1106-1118 is described to be further intersected by reagent introduction channels 1120-1132, respectively, and includes reaction chambers 1134-1146, respectively. The reagent introduction channels 1120-1132 have at their termini, reservoirs 1148:1150, 1152:1154, 1156:1158, 1160:1162, 1164:1166, 1168:1170, and 1172:1174, respectively. Thus, there is not an array of injection channels as claimed, rather each reagent introduction channel 1120-1132 has a single reservoir at it's terminus. For at least these reasons, Applicants believe that **claim 4** is allowable along with dependent **claims 5, 7**.

**Claim 9** includes the method step of providing the capillary array electrophoresis plate of claim 4. Therefore, **claim 9** along with dependent **claims 15-17** are differentiated from Knapp et al. for at least the reasons specified above in relation to claim 4.

Regarding **claim 10**, Applicants do not find each of the elements of the claim in Figs. 9-11. In particular, Applicants do not find an array of injection channels, each channel having a first leg and a second leg, wherein the first leg is connected at one end to a first waste reservoir and at the other end to one of the separation channels, and a first plurality of sample reservoirs are connected to the first leg along the length of the first leg, and the second leg is connected at one end to a second waste reservoir and at the other end to one of the separation channels, and a second plurality of sample reservoirs are connected to the second leg along the length of the second leg. Again, as described in Knapp et al. in relation to Fig. 9, in operation, a sample fluid, e.g., disposed in port 944, is flowed through transverse channel 942, and across the intersection of the parallel channels 904-932 by applying a potential across ports 944 and 946. Thus, there is not an array of injection channels as claimed, rather a single channel 942 intersects the parallel channels 904-932 without any plurality of sample reservoirs. The reasoning applies to Fig. 10 of Knapp et al. In Fig. 11 of Knapp et al., the device is described to include a main sample channel 1114 which is intersected by multiple parallel separation channels 1106-1118. Each of parallel separation channels 1106-1118 is described to be further intersected by reagent introduction channels 1120-1132, respectively, and includes reaction chambers 1134-1146, respectively. The reagent introduction channels 1120-1132 have at their termini, reservoirs 1148:1150, 1152:1154, 1156:1158, 1160:1162, 1164:1166, 1168:1170, and 1172:1174, respectively. Thus, there is not a plurality of sample reservoirs as claimed, rather each reagent introduction channel 1120-1132 has a single reservoir at its terminus. For at least these reasons, Applicants believe that **claim 10** is allowable.

**Claim 11** includes the method step of providing the capillary array electrophoresis plate of claim 10. Therefore, **claim 11** along with dependent **claims 12-14** are differentiated from Knapp et al. for at least the reasons specified above in relation to claim 4.

**Claims 4, 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu (6,533,914 B1).**

Applicants traverse this rejection on the grounds that the 102(e) rejection is improperly applied. The instant application is a continuation of Application No. 08/965,738 which has a filing date of November 7, 1997. The Liu reference has a filing date of June 27, 2000 and claims priority to a provisional application filed on July 8, 1999. Therefore, the Liu reference is not considered 102(e) prior art and the rejections are moot in point.

**Claims 4, 5, 7, 9-17 were rejected under 35 U.S.C. 102(e) as being anticipated by Wiktorowicz et al. (6,214,191 B1).**

Applicants traverse this rejection on the grounds that the 102(e) rejection is improperly applied. The instant application is a continuation of Application No. 08/965,738 which has a filing date of November 7, 1997. The Wiktorowicz et al. reference has a filing date of November 23, 1999 and is a continuation of an application filed on May 22, 1998. Therefore, the Wiktorowicz et al. reference is not considered 102(e) prior art and the rejections are moot in point.

**Claims 4, 5, 7 and 10 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4-8, 10-13, 15-17, 19-22, 24, 27, 29, 39 of U.S. Patent No. 6,143,152.**

Applicants submit a Terminal Disclaimer attached herein relative to U.S. Patent No. 6,143,152, which places this application in condition for allowance.

Appl. No. 09/649,272  
Amdt. dated November 14, 2003  
Amendment under 37 CFR 1.116 Expedited Procedure  
Examining Group

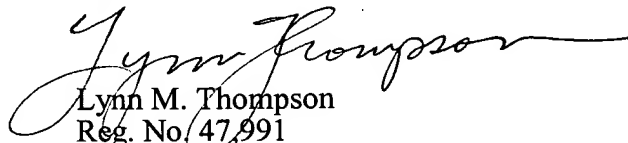
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**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

  
Lynn M. Thompson  
Reg. No. 47,991

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 650-326-2400  
Fax: 415-576-0300  
Attachments  
LMT:lmt/jke  
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